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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants

Jan Burian and Daniel Bartfeld

Application No.

09/444,281

Filed

November 19, 1999

For

EFFICIENT METHODS FOR PRODUCING ANTIMICROBIAL

CATIONIC PEPTIDES IN HOST CELLS

Examiner

: Holly Schnizer

Art Unit

: 1653

Docket No.

: 660081.411

Date

: December 17, 2001

Commissioner for Patents Washington, DC 20231

## DECLARATION UNDER 37 C.F.R. §1.131

## Commissioner for Patents:

We, Jan Burian and Daniel Bartfeld, do hereby declare that:

- 1. We are joint inventors of the subject matter described in the above-identified patent application (hereinafter referred to as "subject application").
- 2. All of the work described within this Declaration was performed in Vancouver, British Columbia, Canada, by ourselves, or on our behalf, and under our direction.

- 3. We have reviewed our laboratory records, including the Exhibit submitted herewith, and readily conclude that compositions of matter and methods as claimed in the subject application were conceived prior to 1998. Further, due diligence was exercised from this time period until the invention was either actually reduced to practice or until the filing of the subject application.
- 4. The following Exhibit (annexed hereto) represents laboratory notebook pages kept in the regular course of business at Micrologix Biotech, Inc. The dates have been removed from the copies submitted herewith. It is our understanding, based on discussions with assignee's representatives, that this is a permissible U.S. Patent Office practice.
- 5. The Exhibit, which is a photocopy of several pages from laboratory notebooks of those working under our supervision, discloses a multi-domain fusion protein expression cassette having a carrier sequence and two copies of sequence encoding a cationic peptide separated by a spacer sequence (see Notebook 52, page 92; Notebook 82, pages 29-30, 48-49, and 52), which is similar to the multi-domain fusion protein expression cassettes described in the subject application (see, e.g., Figure 6). Also disclosed are expression cassettes having three (see Notebook 91, page 69) and four copies of a cationic peptide (see Notebook 82, pages 29-30, 48-49, and 52; Notebook 91, page 68). Also disclosed are multi-domain fusion protein expression cassettes having cationic peptide encoding sequences (single and multiple copies) with carrier sequences (see Notebook 63, pages 84-86). Each nucleic acid expression construct was introduced into at least one strain of Escherichia coli, the recombinant bacteria were grown under various conditions, and expression levels were examined by SDS polyacrylamide gel electrophoresis (see, e.g., Notebook 82, pages 27-30).
- 6. The experiments demonstrate that various multi-domain fusion protein expression cassettes were capable of expressing, when introduced into a host cell, fusion proteins having multiple copies of a cationic peptide.

7. In summary, upon review of our laboratory notebooks, of which the above-cited pages are representative, we have concluded that, at least prior to 1998, we had conceived of the compositions of matter and methods as described and claimed within the subject application. Furthermore, our conception of the invention led to further research, diligently undertaken, resulting in an actual reduction to practice or in the filing of the subject application.

8. We further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that the making of willfully false statements and the like is punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and may jeopardize the validity of any patent issuing from this patent application.

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| Jan Burian              |          |        |
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| Dated this 3rd day of _ | December | , 2001 |
| Danibaled               |          |        |
| Daniel Bartfeld         |          |        |

Dated this day of \_\_\_\_\_\_\_\_\_, 2001

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